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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/879,609 | 06/12/2001 | Bernard Beier | 600.1161 | 5275 |

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| EXAMINER |
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NGHIEM, MICHAEL P

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| ART UNIT | PAPER NUMBER |
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2863

DATE MAILED: 08/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/879,609

Applicant(s)

BEIER ET AL.

Examiner

Michael P Nghiem

Art Unit

2863

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,4-16 and 18-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-11,25 and 26 is/are allowed.
- 6) ☒ Claim(s) 2,4-8,12-16,23 and 24 is/are rejected.
- 7) ☒ Claim(s) 18-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

The Amendment filed on May 26, 2003 has been acknowledged.

Withdrawal of Allowability

1. The indicated allowability of claims 3 (cancelled now in claims 2 and 23) and 5 is withdrawn in view of the newly discovered reference(s) to Ohta et al. (US 5,300,956). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Is the direction of the axis defined by the line of the image points (lines 8-9) shown in Fig. 2 as element (212)?

Is the direction of the axis defined by the line of the image points (lines 8-9) different from the direction defined by the n image points (line 10)?

Claim R jections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2, 4-8, 12, 15, 16, 23, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohta et al. (US 5,300,956).

Ohta et al. discloses all the claimed features of the invention including:

- a device for imaging printing plates (Fig. 21) comprising:

- an array of n laser diodes (1) which image n image points (B1, B2, Fig. 1), so that one laser diode of the array is allocated to each i th point, with i being from $\{1, \dots, n\}$ (Fig. 1), the n image points being separated by a spatial interval l (r3) between adjacent image points (column 2, lines 38-39), with a pitch distance p (dx) of dots to be imaged by the array (column 2, lines 9-10),

- the laser diodes being individually-drivable single stripe laser diodes (Abstract, lines 1-3), wherein the spatial interval l between adjacent image points (column 2, lines 38-39), measured in units of the pitch distance p of the dots (column 2, lines 38-40), is an integral multiple m (l) of the pitch distance p between the dots;

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- the integral multiple m and the number n of image points have no common divisor (column 2, lines 41-44);
- the spatial interval l of adjacent image points, measured in units of the pitch distance p of the dots, is smaller than the number n of the image points (Figs. 1, 3's);
- the multiple m and the number n of the image points are prime numbers (column 2, lines 43-44);
- imaging optics (2) for correcting at least one of divergence and aberration (Figs. 4, 21);
- a control unit (controller in laser printer), at least one of the laser diodes of the array being controlled by the control unit (Abstract, lines 1-3);
- the number of laser diodes in the array is between 10 and 100 (based on number of spots, Figs. 3's);
- a detector for determining a power output of at least one of the plurality of laser diodes and a laser controller, the laser controller being controlled as a function of the power output determined by the detector (detection device is inherent with laser power and spot size control, column 10, line 64 – column 11, line 25);
- imaging optics including at least one reflective optical element (7, Fig. 21);
- imaging optics having micro-optical components (Fig. 21).

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Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta et al. in view of Sarraf (US 5,521,748).

Ohta et al. does not disclose that at least one laser diode is a pulse controlled laser.

Nevertheless, Sarraf discloses a pulse controlled laser (column 2, lines 31-33) for the purpose of reducing average power density.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide Ohta et al. with a pulse controlled laser for the purpose of reducing average power density.

Allowabl Subj ct Matter

5. Claims 18-22 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

6. Claims 9-11, 25, and 26 are allowed.

Reasons For Allowance

7. The combination or method as claimed wherein the laser diodes are spaced apart on the array by a distance of between 100 and 1000 micrometers, and a width of emitter surfaces of the laser diodes is less than 10 micrometers (claims 9, 25) or repeating the displacement steps, an amount of the second specific displacement being greater than the spatial interval l of adjacent image points (claim 18) is not disclosed, suggested, or made obvious by the prior art of record.

Response to Arguments

8. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.


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Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (703) 306-3445. The examiner can normally be reached on M-H from 6:30AM – 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached at (703) 308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-5841 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



**MICHAEL NGHIEM
PRIMARY EXAMINER**

Michael Nghiem

August 8, 2003